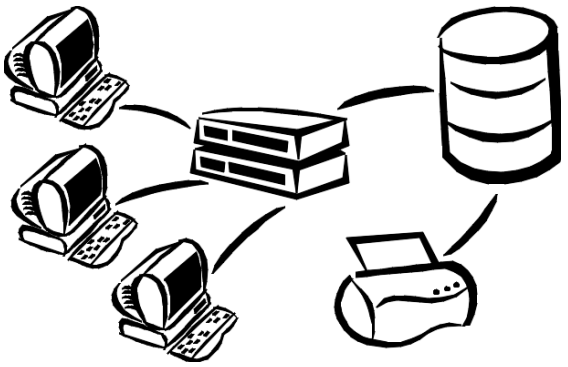
SMC®
Networks

Barricade



User's Guide

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Document Version: 2.0
P/N 9560DC00BA

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1 About your Barricade

Congratulations on the purchase of your new **Barricade**. The Barricade provides shared storage, shared printer usage, and shared Internet access to both Macintosh and Windows users on your LAN.

Barricade Features

- ***Create or Extend your LAN.*** The built-in 7-port switching hub supports 10BaseT and 100BaseTX to allow connection of any existing devices, while the 10/100BaseT Uplink port provides for connection to another hub.
- ***Supports Windows and Macintosh.*** Clients can be either Microsoft Windows PCs (Windows 95, 98, ME, NT4.0, 2000), or Apple Macintoshes.
- ***Built-in Print Server.*** LAN users - both Windows and Mac - can share the printer attached to the Barricade, converting it to a "Network Printer".
- ***No Client Software.*** No software needs to be installed on either Windows or Macintosh clients.
- ***File Management using OS tools.*** Once your PC has access to the Barricade, you can manage your folders and files using the familiar tools provided by your operating system. For example, Windows users will see the Barricade as an additional drive in *Windows Explorer* and *My Computer*.
- ***DHCP Server Support.*** A DHCP (**D**ynamic **H**ost **C**onfiguration **P**rotocol) **Server** provides a dynamic IP address to PCs and other devices upon request. The requesting devices are called DHCP **Clients**.
  The Barricade can act as either a **DHCP Server** OR a **DHCP Client**.
- ***Multi Segment LAN Support.*** If you have a Router, PCs on other LAN segments can also use the Barricade.
- ***Easy Setup.*** A *Quickset* Windows program is provided to allow speedy configuration of the Barricade
- ***Full Administrator Control over Disk Usage.*** The LAN Administrator can control usage of the Barricade's disk storage by the following means:
  - **Users**: To control access to the Barricade, each user has a password
    The Administrator can also limit the Disk Storage available to a user.
  - **Groups**: Users are organized into Groups. A user can be in many Groups.
  - **Shares**: A "Share" is a folder (directory) on the Barricade which a User Group can access. Only the Barricade Administrator can create Shares. (Users can create folders within the Share.)
  - **Access Rights**: Access to Shares can be *Read-Only*, *Read-Write*, or *No Access*. Conveniently, access to Shares is set by Group, not by individual user.
- ***Remote Management.*** The Barricade can be managed from a workstation anywhere on the LAN, using a WEB browser.

- ***Internet Access.*** The Internet Access feature allows all LAN users to share a single Internet Account, using either the serial port (for analog modem or ISDN TA) or the WAN port (for ADSL or Cable modems). The built-in firewall protects your LAN against external attacks.
- ***Advanced Internet Features.*** The Barricade incorporates a number of advanced features to add value to your Internet Access:
  - **Special Applications** allows LAN users to use non-standard applications such as Video-conferencing, Instant Messaging, and other 2-way Internet applications.
  - **Virtual Servers** allows Internet users to access Web, E-Mail, FTP and other Servers on your LAN, while still sharing the IP Address provided by your ISP.
  - **Filtering** functions provide protection for LAN users. You can block high-risk components such as ActiveX controls. Also, the Site Filter feature allows you to create your own lists of "Allowed" and "Banned" sites. And the "Log" function can record any attempted accesses which are blocked by the Site Filter.

Package Contents

The following items should be included:

- The Barricade Unit.
- Power Adapter
- CD-ROM, containing this User Manual and the Barricade Utility program for Windows 95/98/ME/NT4.0/2000.
- Printed User Manual.

If any of the above items are damaged or missing, please contact your dealer as soon as possible.

System Requirements

- Ethernet Network employing 10BaseT or 100BaseTX.
- TCP/IP protocol.

The following client PCs are supported:

- PC using Windows 95/98/ME or later.
- PC using Windows NT4.0 or Windows 2000.
- Apple Macintosh with AppleShare and system 7.5 or later.

Connections and Components

All connections and switches are on the rear panel. Please take a few minutes to familiarize yourself with your new Barricade.

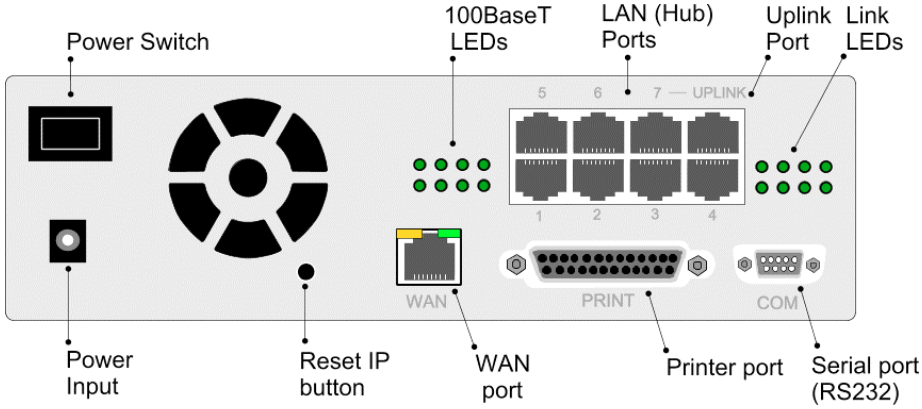

Figure 1: Barricade Rear Panel

Power Switch	This is a spring-loaded "Soft Switch". If Off, press once to turn On. If On, press once to start the Disk ***Shutdown*** sequence. During *Shutdown*, the *Ready* LEDs will blink.
100Base LEDs	These LEDs match the LAN (Hub) connectors. If the matching LAN connector is using 100BaseT, the LED will be ON. If using 10BaseT, the LED will be OFF.
LAN (Hub) ports	These Ethernet connectors are for the PCs and other devices on your LAN. Both 10BaseT and 100BaseT connections can be used simultaneously. **Note**: If Port 7 is used, then the "Uplink" port (see below) can NOT be used.
Uplink Port	Use this port only to connect to a standard port on another Hub. The other Hub can be either 10BaseT or 100BaseT. **Note**: If the "Uplink" port is used, then Port 7 can NOT be used.
Link LEDs	These LEDs match the LAN (Hub) connectors. If the matching LAN connector is in use, the LED will be ON.
Power Input	Connect the supplied power adapter here.

Reset IP Button (IP/Password)	If the Barricade's IP Address or password is lost, press and release this button. The Barricade will beep once to indicate the reset has occurred. The Barricade password will be cleared, and its IP Address set to the default value of 192.168.123.254, with a Network Mask of 255.255.255.0 You can then connect to the Barricade and set the correct IP Address and password.
WAN Port	Connect your ADSL or Cable modem here. This Ethernet port supports 10BaseT and 100BaseT, and has 2 built-in LEDs. The amber LED (on the left) indicates a 100BaseT connection. The green LED (on the right) indicates a 10BaseT connection.
Printer Port	Standard parallel printer port. A printer connected here becomes a "network printer", and can be shared by Windows and Macintosh users.
Serial Port	Standard serial port. Connect an analog modem or ISDN TA here if you wish to provide shared Internet access to LAN users via the serial port.

LEDs (Front Panel)

There are five (5) status LEDs on the front panel, as follows:

Ready	Normally ON. This blinks during Startup or Shutdown, and turns OFF after the shutdown is completed.
Error (Amber)	Normally OFF. However, it will be On during the power-on self test. Once the self-test is completed, it will turn OFF. If it stays ON, there is a hardware error. During a software upgrade, both the **Ready** and **Error** LEDs will blink.
Disk Full	Normally OFF. Blinking indicates the disk is 98% full. ON indicates the disk is completely full.
Disk	Flashes during normal operation, when the Hard Disk is accessed.
WAN	Flashes when data is transmitted or received via the WAN (Internet Access) port

Buzzer

The buzzer will beep as follows:

- **1 Beep** - Reset button or power switch is pressed.
- **2 Beeps** (Repeated every 5 seconds for 1 minute) - Barricade is a DHCP client, but no DHCP Server responded to the DHCP client request.
- **3 Beeps** (Repeated every 15 seconds for 3 minutes) - Hard disk usage exceeds 98%.
- **5 Beeps** (Repeated every 15 seconds for 3 minutes) - Overheating; automatic shutdown will start 3minutes after 1st beep.

Specifications

Dimensions	210mm (W) * 271mm (D) * 66mm (H) 8" (W) * 11" (D) * 3" (H)
Operating Temperature	5° C to 40° C
Storage Temperature	-10° C to 60° C
Network Protocol	TCP/IP, AppleShare, SMB
Network Interface	7-port Switching hub Auto-sensing Ethernet 10BaseT or 100BaseTX UTP, RJ45 connector
WAN Interface	1 Auto-sensing Ethernet 10BaseT or 100BaseTX UTP, RJ45 connector
Printer Port	1 Centronic parallel port
Serial Port	1 RS232 serial port
LEDs	Rear: - 16 LAN connection status, 2 WAN port connection status. Front: - 5 status/operation
Power	12V DC , maximum 3.6 amps. 100- 240 V AC, 50-60Hz power adapter provided.

FCC Statement:

This device complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

CE Marking Warning

This is a Class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Caution!

This device contains a battery. There is a danger of explosion if the battery is incorrectly replaced. Dealer replacement of the battery is recommended. Replace only with the same or equivalent type. Dispose of used batteries according to the manufacturer's instructions.

2 Installation and Setup

Requirements

- Ethernet Network employing 10BaseT or 100BaseTX.
- TCP/IP protocol.

LAN Installation

1. Connect Network Devices

- Use standard LAN cables to connect any existing devices to the Barricade's LAN (Hub) ports. The Barricade will accept 10BaseT or 100BaseTX, and full or half duplex. All types may be used simultaneously.
- If required, use a standard LAN cable to connect the Barricade's "Uplink" port to a standard port on another Hub. The other Hub can be either 10BaseT or 100BaseT. Note that if using the "Uplink" port, port 7 on the Barricade can NOT be used.

2. Connect Printer and Modem

- If you wish to share a printer, use a standard printer cable to connect the printer to the Barricade's parallel port.
- If you wish to provide shared Internet access via the Barricade, connect your modem:
  - If using an Analog Modem or ISDN TA, use a standard serial cable to connect your modem to the Barricade's serial port.
  - If using an ADSL Modem or Cable modem, connect the modem to the Barricade's WAN port. Use the cable supplied with your Modem. If no cable was provided, use a standard LAN cable.

3. Connect Power

- Connect the supplied power adapter to a power outlet and the Barricade.
- Press and release the rear-mounted power switch to begin the start-up procedure.

4. Check the boot process

- During the self-test (2 or 3 seconds), ALL of the LEDs will be ON.
- During the boot process, the ***Ready, Error*** and ***Disk Full*** LEDs will be ON.
- Once the boot process is completed, the ***Ready*** LED should be ON and the ***Error*** LED should be OFF. If the ***Error*** LED stays On, there is a hardware problem. Repeated beeps also indicate a failure to boot correctly.

Barricade Setup using Windows

- For basic operation, only the following setup is required.
- For the full range of options available to the Network Administrator, refer to *Chapter 3 - Administration.*

Software Installation

1. Insert the supplied CD-ROM into the drive of your Windows 95/98/ME or Windows NT4.0/2000 system.
2. If the Setup program does not start, run SETUP.EXE in the root directory.
3. Click the *Barricade Utility* button.
4. Follow the prompts to install the *Barricade Utility*.

Using the Barricade Utility

1. Start the program. Normally, the program will start immediately after installation. Otherwise, use the Start Menu option created by the installation.
2. The screen will look like the example below. The left section displays a list of all Barricades. The right section displays data about the currently-selected Barricade. (If no Barricades are listed, see the Troubleshooting section.)

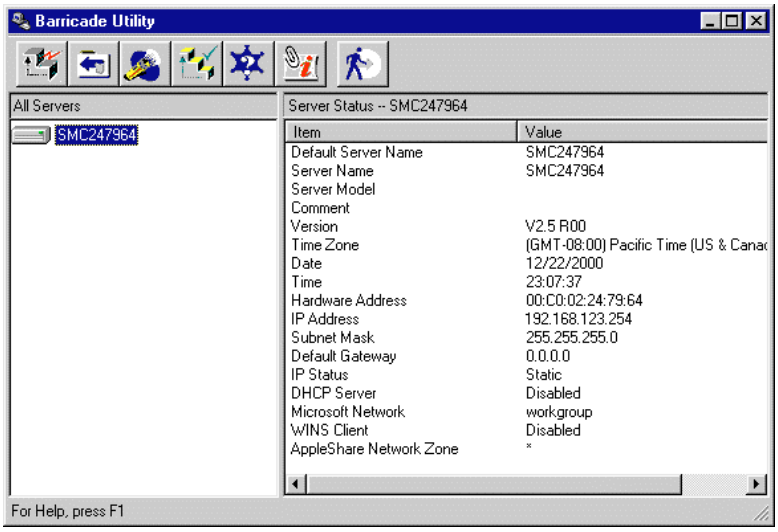

Figure 2: Barricade Utility

Setup Wizard

3. Ensure that the desired Barricade is selected in the left panel, then click the *Setup Wizard* icon.

4. If you are prompted for a User Name and Password, enter *admin* for the user name, and the password you have assigned to the *admin* user (By default, there is no password, so the Password field can be left blank.)

5. The *Setup Wizard* will then start. Step through the Wizard and complete each screen. The following data will be required:

Server

Server Name:	The *Default Name* is shown. Change this if you wish.
Comment:	Comments (e.g. Location of the Barricade) are optional.
Time Zone	Select your time zone from the list.
Date/Time	Enter the local date (mm/dd/yyyy format) and time.

Microsoft Networking

Workgroup Name:	Normally, this name should match the *Workgroup* name used by PCs on your LAN.
WINS	If your LAN has a WINS (Windows Internet Naming Service) Server, check the box and enter the IP Address of the WINS Server.

TCP/IP

Selecting "DHCP Client" will disable Internet Access via the Barricade.

Obtain an IP Address automatically (DHCP Client)	If you have a DHCP or Bootp server on your LAN, you can enable this setting. The Barricade will then obtain its IP Address from the DHCP or Bootp server. However, because this is a Server, it is preferable to use a **Fixed IP Address**. **Also, the "DHCP Client" setting will disable Internet Access via the Barricade.** If your LAN does not have a DHCP server, then you **must** select **Fixed IP Address**.
Fixed IP Address:	This option is required if you wish to use the DHCP Server function. It is also necessary to allow the Barricade to act as an Internet Gateway, providing shared Internet access to LAN clients.

IP Address:	The current value will be displayed. If this is not valid for the current location, a warning message will displayed. You can enter a new value, or use the "Suggest New Values" button to get the Wizard to select an unused value from the Address range used on your LAN.
Network Mask:	The must match the value used by PCs on your LAN. The default Barricade value is 255.255.255.0
Gateway:	If you have a Router, enter its IP Address here. Otherwise, leave this at the default value.
Enable DHCP Server:	If checked, the Barricade will provide an IP Address and related data to PCs on request. PCs will only make such as request if they are set to act as **DHCP clients**. (See *Windows Client Setup* and *Macintosh Client Setup* for details of DHCP Client configuration.)
Start IP Address:	The first value for the range of IP Addresses to be allocated by the DHCP Server.
Finish IP Address:	The last value for the range of IP Addresses to be allocated by the DHCP Server Ensure that the range is large enough for the number of DHCP clients (the PCs and other devices making DHCP requests).

Internet Access

Access Method	Select the appropriate setting. If Internet access via this Server is not required, select *None*.
Internet Access Setup	This screen will vary depending on the Internet Access method used. This data is available from your ISP.

6. When the Wizard is complete, the Barricade is operational, with the following limitations.
   - All Windows users will be given "Guest" access rights. This allows Printer usage, and access to the *public* folder.
   - The advanced Internet-related features (Special Applications, Filtering, Virtual Servers) are not configured. See Chapter 4 for further details of the advanced Internet functions.
   - Macintosh users can only access Barricade storage with the *guest* network logon, or by logging on as *admin* with no password. (The *admin* user has access rights to ALL folders.)

- Macintosh users can only access the printer if it is a LaserWriter or compatible.

To overcome these limitations

- Use the Browser-based *Administration* interface to perform the required Barricade configuration. This is invoked with the *Administration* icon on the Barricade Utility's main screen. See Chapter 3 for details on using the Administration interface.
- Configure the client PCs as required:
  - Details on Client setup for Windows PCs are contained in Chapter 5.
  - For Macintosh systems, refer to Chapter 6.

Barricade Setup using Macintosh

If your PC is not running Windows 95/98/ME/NT4/2000, you cannot use the SETUP program on the CD-ROM.

Instead, you must connect to the Barricade, and configure it, using your Web Browser. Your Web Browser must support JavaScript V1.1.

The interface has been tested to work on the following Browsers:

- Netscape Navigator 4.08 or later
- Internet Explorer 4.0, 5.0, and 5.5

Connecting to the Barricade

1. Ensure your system has a compatible *IP Address* and *Network Mask (Subnet Mask)*.
   - The Barricade's default values are 192.168.123.254 for the IP Address, with a Network mask of 255.255.255.0. Your PC should use the same Network Mask, and an IP Address in the range 192.168.123.1 to 192.168.123.253.
   - On the Macintosh, you can check using *Apple - Control Panel - TCP/IP*. (If this option does not exist, then TCP/IP has not been installed. Use your Apple system disk to install TCP/IP.)
2. Connect to the Barricade using your Web Browser:
   a) Start your Browser
   b) In the *Address* box, enter the following:

      `HTTP://ip_address`

      Where `ip_address` is the IP Address of the Barricade, as in the following example:

      `HTTP://`192.168.123.254

c) You will be prompted for a name and password.

Enter *admin* for the name, and leave the password blank. Later, if you set a password for the *admin* user, you will be required to enter it here to gain access to the Barricade.

3. On the first screen, click the *Administration* button to continue. You will then see the main menu, as shown below.

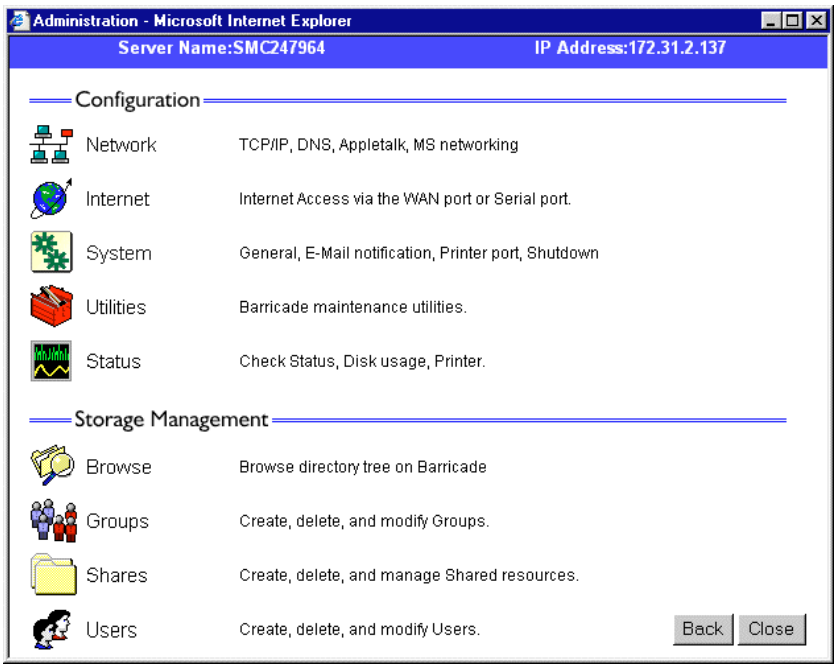

Figure 3: Web Interface - Main Menu

If this Server is set to be a DHCP Client, it cannot provide Internet Access.

4. Select ***Network***.
   - Configure the ***TCP/IP*** tab. Use the on-line help as necessary.
   - If desired, change the settings on the ***AppleTalk*** tab.
   - Save your data.
5. Macintosh users can now access the Barricade, provided they use the *Guest* button on the Network login, or login as *admin*.
   - As *guest*, they will have access to the *public* share. The Barricade Administrator can grant access to other shares by changing the access rights to the *everyone* group.
   - The *admin* user has access rights to ALL folders. By default, the *admin* user has no password, but one can and should be assigned.
   - Internet Access is not enabled. Use the Web Administration interface to configure the Barricade for shared Internet Access.
   - For further details on using the Web Administration interface, refer to *Chapter 3 - Administration*.

Printer Setup

- If using a LaserWriter, no setup is required. Just perform the client setup procedure in *Chapter 5 - Macintosh Client Setup*.
- If not using a LaserWriter, Mac clients must install the printer driver for the Barricade's printer.

  Also, the *System - Printer Port* screen (below) must be correct. Select "Other" for *Printer connected to Barricade* and ensure the *Printer Object Type* is correct. Check your printer's documentation to find the *Printer Object Type*.

  Once this is done, the procedure in *Chapter 5 - Macintosh Client Setup* can be performed.

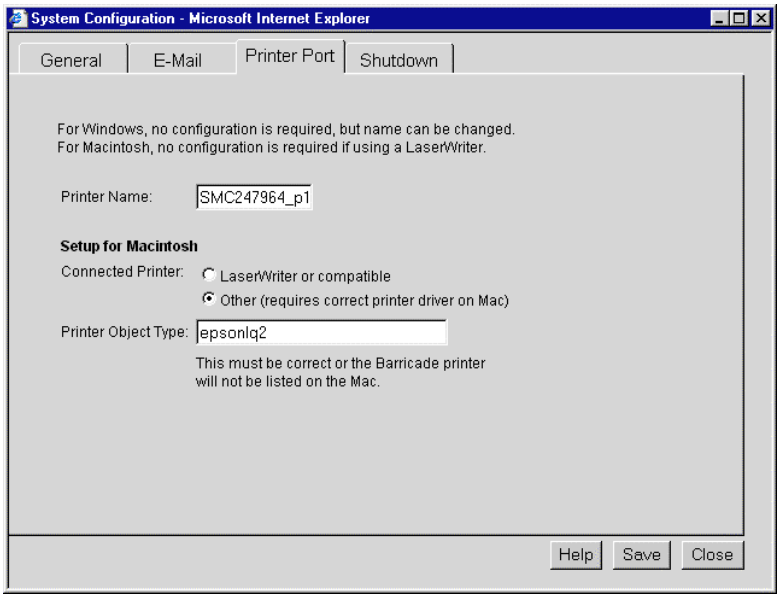

Figure 4: System - Printer tab

Setup for Internet Access

See Chapter 4 for details on configuring and using the Internet Access function.

Other LAN Devices

If you have a Router, or an existing DHCP Server, it may need to be configured.

Router and/or DHCP Server Configuration is required ONLY if using the Barricade to provide shared Internet Access.

Note:

If the Barricade is acting as a **DHCP Client** (rather than a **DHCP Server**), than it can NOT provide shared Internet Access.

If the Barricade has a **fixed IP Address**, it CAN provide shared Internet Access. So it is possible to use an existing DHCP Server on your LAN, provided the Barricade is not a DHCP Client.

Router Configuration

- If your LAN has a Router or Routers, it or they must be configured to pass Internet packets to the Barricade.
- Generally, this is done by setting the “Default Route” to be the Barricade. If necessary, check your Router’s documentation for details of this procedure.

Existing DHCP Server Configuration

If your LAN is using another DHCP Server (rather than the Barricade’s), configure the DHCP Server to provide the Barricade's IP Address as the Gateway IP Address.

3 Administration

Overview

The Barricade administrator can control Barricade usage by creating and managing Users, Groups, and Shares.

- **Users**: Each user is identified by their *User Name* and *Password*. The Administrator can create Users, and also limit the amount of Disk Storage available to a user.
- **Groups**: Users are organized into user Groups. A user can belong to many Groups.
- **Shares**: A "Share" is a folder (directory) on the Barricade which users can access. Only the Barricade Administrator can create Shares. However, within a Share, users who have access to that Share can create other folders (directories) as well as files.
- **Access Rights**: Access to a share can be "Read-only" or "Read-Write". To reduce administration workload, access to a Share is granted to a User Group, rather than to individual users.

AppleShare does NOT support "Read-only" access, so access is always "Read-Write".

Note:

- A Share can be accessed by only 1 Group, but a Group can access many Shares.
- The *admin* user, and any other users who are added to the *administrator* group, ALWAYS have Read/Write access to ALL shares and folders.
- The *guest* user has Read/Write access to the *public* share. This can be changed, and access to additional shares can be granted, by changing the access rights for the *everyone* group.
- Users who do not have a *User Name* on the Barricade are automatically given the *guest* login.

Web Interface

To create and manage users, groups and shares, a Web-style interface is provided.

The Barricade contains a HTTP server. This enables you to connect to it, and configure it, using a Web Browser. The Web Browser must support JavaScript V1.1 The interface has been tested on the following Browsers:

- Netscape Navigator 4.08 or later
- Internet Explorer 4.0, 5.0, and 5.5

Connecting to the Barricade

Windows Users

1. Start the Barricade Utility, and select the desired Barricade.
2. Click the *Administration* icon.
3. You will be prompted for the password, as shown below

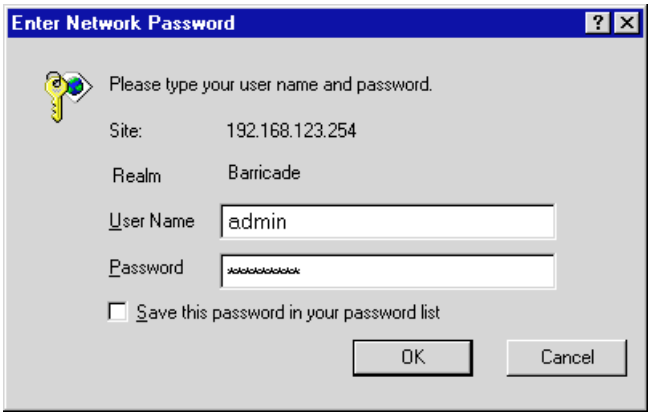

Figure 5: Password Prompt

Enter *admin* for the **User Name**. By default, there is no password, but if you have set a password for the *admin* user, enter it here.

You will then see the Welcome screen.
Click the *Administration* button to proceed to the **Main Menu**. See the next section for details.

Other Users

1. Start your WEB browser
2. In the *Address* box, enter the following:
   `HTTP://ip_address`
   Where `ip_address` is the IP Address of the Barricade, as in the following example:
   `HTTP://192.168.123.254`
3. You will be prompted for the password, as shown in *Figure 5: Password Prompt* above. Enter *admin* for the **User Name**. By default, there is no password for the *admin* user, but if you have set a password, you must enter it here.

   You will then see the first screen. If you have multiple Barricades, you can use the *Connect* button to switch to another Barricade. Otherwise, click the *Administration* button to proceed to the **Main Menu**.

Main Menu

The **Main Menu** screen looks like the example below:

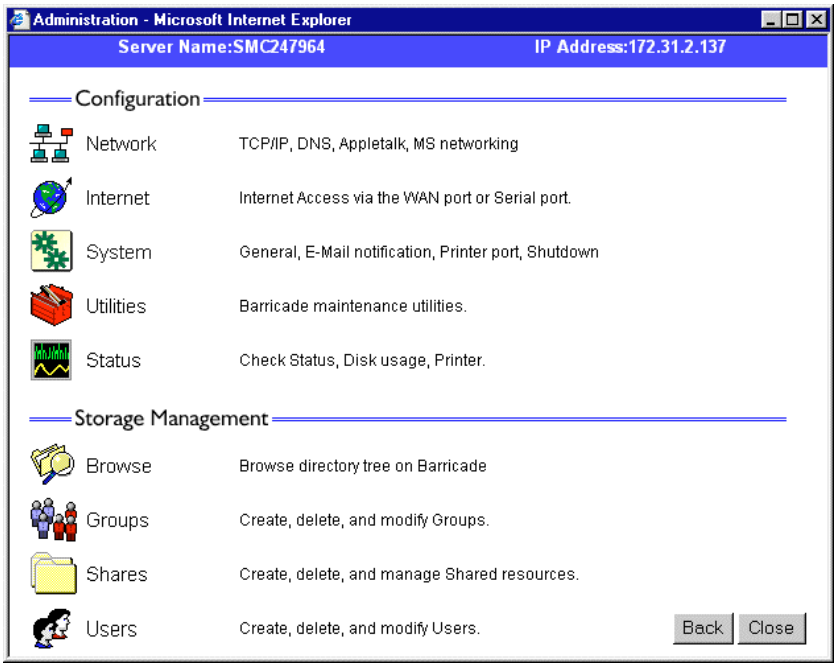

Figure 6: Web Interface - Main Menu

The options on the main menu are divided into 2 groups:

- Configuration
- Storage Management

Configuration Group

Network

- **TCP/IP** - Configure IP Address, DHCP Server function, and DNS (Domain Name Server).
- **AppleTalk** - Set the AppleTalk *Zone*. The default value is "*", which allows access by all zones.
- **Microsoft** - Configure Microsoft networking; set *Workgroup Name*, *Code Page* (alphabet) and WINS (Windows Internet Naming System).

Internet

Use this option to provide shared Internet access to LAN users.

- **Connection** - Select the method of Internet Access used (Serial or WAN port), and selectively enable or disable Internet-related services available to LAN us-

ers. The *Configure* button on this screen provide for setup of the selected Internet Access method.

- **Filter** - Enable and configure the *Component Filter* and the *Site Filter* (*Allowed* and *Banned* site lists). The *Filter Log* is also accessible from this screen.
- **Special Apps** - Use non-standard Internet Applications which would normally be blocked by the built-in firewall.
- **Virtual Servers** - Allow Internet users to access Web, E-Mail, FTP, and other Servers on your LAN.
- **Status** - Check the status of the Internet connection.

System

- **General** - Set the Barricade name, date and time, and Time Zone.
- **E -Mail** - Configure the Barricade to send E-Mail messages when there is a problem.
- **Printer Port** - Configure the Printer. This is helpful but not essential for Windows users.
  It is essential for Macintosh users when the printer connected to the Barricade is NOT a LaserWriter or compatible.
- **Shutdown** - Shutdown the Barricade, or create a shutdown schedule.

Utilities

These utilities are not required for normal operation.

- **Disk** - Check the disk for errors, similar to Scandisk. If multiple disks are fitted, you can also format a new disk.
- **Upgrade** - Upgrade the Barricade software.

Status

- **Disk** - Check disk usage. This data is read-only.
- **Printer** - Check the printer status, and delete the current print job, or all print jobs.
- **System** - Check System status. This data is read-only. From this screen, you can also view the system log.

Storage Management Group

Use these options to manage *Shares*, *Users*, *Groups*, and access to shares. See the later section ***Managing Shares, Groups and Users*** for further details.

Browse

Browse the Shares and folders on the Barricade. This allows you to:

- See the relationship between *Shares* and folders on the hard disk.
- View the directory structure on the Barricade.

Groups

- View the current Groups, modify their access to Shares, and add or delete Users from any Group.
- Create new Groups, or delete existing Groups.

Shares

- Create, delete and modify Shares. A "Share" is a folder (directory) which Users can access.
- Access rights are set by Group rather than by individual user.

Users

- View the list of existing users, and modify individual user data.
- Create or delete individual users.

Note:

- The *guest* and *admin* users cannot be deleted.
- The *admin* user cannot be removed or moved from its existing group "administrator".
- By default, the *admin* user has no password. Assigning a password is recommended.
- The *admin* user, and all other members of the *administrator* group, **always** have Read/Write access to **all** shares and folders.
- The properties for the *guest* user cannot be changed.

Managing Shares, Groups, and Users

This section has additional information to assist the Barricade Administrator in managing and controlling access to the Barricade.

Terminology

- A ***Share*** is a folder on the Barricade which can be accessed by client PCs on the LAN. Only the Administrator can create ***Shares***.
- ***Access Rights*** (Read-only or Read-Write) are permissions to use a ***Share***. ***Access Rights*** are granted to a ***Group*** (group of users), rather than to individual users.
- Each ***Share*** can only be accessed by a single ***Group***.
- A ***Group*** can have access to many ***Shares***.
- Each individual ***User*** can belong to many ***Groups***.

Special Shares, Users and Groups

When delivered, the Barricade will have the following shares, groups and users. These cannot be deleted, and only limited modifications may be performed.

Shares & Folders

HDD1	• This is the root folder. Backing up this share backs up all data on the drive. • The *administrator* group ALWAYS has Read/Write access to this share.
public share	• By default, the *everyone* group has Read/Write access to this folder. This can not be changed, so ALL users always have Read/Write access to the *public* share. • This share can not be deleted.
spool folder	• System folder, holding print jobs waiting to be printed. This folder can be accessed via the ***Browse*** menu option. • Deleting a file cancels the corresponding print job.

Groups

everyone	• This group cannot be deleted. • All users are members of this group, and cannot be removed from this group.

administrator	• ALWAYS has Read/Write access to ALL shares. • This group cannot be deleted. • The *admin* user cannot be removed from this group, but other users may be added or deleted.

Users

admin	• This user cannot be deleted. • The *admin* user is a member of the *administrator* group, and therefore has Read/Write access to all shares. • By default, the *admin* user has no password, but a password can be assigned. Assigning a password is recommended.
guest	• This user cannot be deleted. • The *guest* user is a member of the *everyone* group, and so has the access rights of the *everyone* group. • The properties of the *guest* user can NOT be changed.

Nested Shares

The Barricade allows a folder inside a share to be a share. This allows "nesting" of shares to any depth. If using this feature, remember that:

- In Windows' *Network Neighborhood*, all shares are listed on the same level - the "nesting" is completely invisible.
- When a user accesses a share, they will see only folders, never shares. Users cannot tell whether or not a sub-folder is in fact a nested share.
- Anyone with access to the outer share automatically has the same access rights to any inner shares. So the most sensitive data must be kept in the **outermost** share, not the innermost share. This is illustrated below.

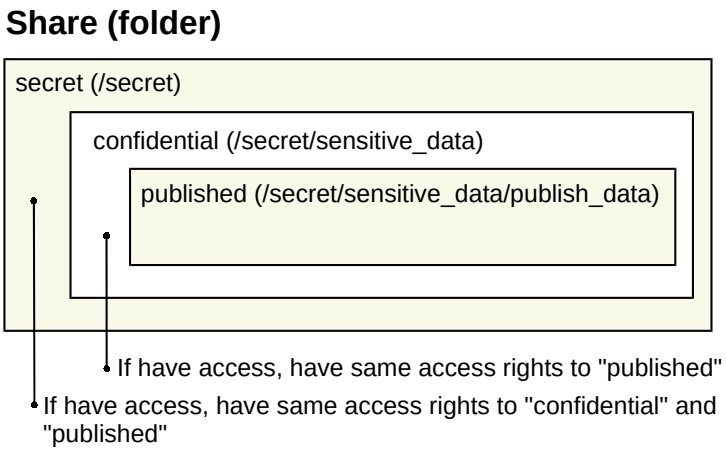
Share (folder)
secret (/secret)
confidential (/secret/sensitive_data)
published (/secret/sensitive_data/publish_data)
If have access, have same access rights to "published"
If have access, have same access rights to "confidential" and "published"

Figure 7: Nested Shares

Multiple Access Rights

- Access to a Share can be assigned to only 1 Group, but using nested Shares may result in multiple groups being able to access a Share.
  In the example above, if access to the shares "secret", "confidential", and "published" were assigned to the groups "managers", "supervisors", and "staff" respectively, then all 3 groups would have access to the share "published".
- If an individual user is in 2 groups with different access rights, they would receive the **Least Restrictive** access permission.

Common Administrative Tasks

Task	Procedure
Protect Barricade configuration	Assign a password to the *Admin* user. Select *Users*, then select the *Admin* user, and click *Modify*.
Create Users	*Users* menu option. Click *New User*.
Edit User Details	*Users* menu option. Select the user, then click *Modify*.
Create Groups	*Groups* menu. Click *New Group*.
Change Group Membership	• Select the Group on the *Groups* screen, and click *Members*. • OR, select the User on the *Users* screen, and click *Groups*.
Create Shares	*Shares* menu option. Click *New Share*.
Set Access to Shares	*Groups* menu. Select the Group, then click the *Shares* button. On the *Group/Share Relationship* screen, you can select the Share(s) and the type of access for this Group.

File Management	Within any Share to which you have access, you can use Windows Explorer to perform file management. Users in the *Administrator* group can access any share, and can also access the share "HDD1", which is the root directory on the Barricade.
	Note:
	You may sometimes see the following files, which have been generated by AppleTalk clients:
	`.Apple Desktop`
	`.Apple Double`
	`Network Trash Folder`
	Do NOT delete these files!

Backup data on the Server	Use your backup program to backup any folder. To backup all files, users in the *Administrator* group can backup the HDD1 folder.
Shutdown the Server	User either of the following methods: • Press the rear-mounted power switch ONCE. • Use the *System - Shutdown* menu option to perform a remote or scheduled shutdown.

Ready LED blinks during shutdown.

Printer and Printing Management

Task	Procedure
Configure the Printer Port	**Windows Clients** The correct printer name should be entered on the *System - Printer* screen. This has no effect on operation, but helps uses identify the printer when they browse the network. **Macintosh Clients** See the following section.
Manage Print Jobs	Select *Status*, then the *Printer* tab. This screen indicates how many print jobs are currently in the queue. The *Delete Current Job* button can be used to delete the current job if it is not printing correctly. Use the *Delete all Jobs* button to delete all jobs in the print queue.

Printer Setup for Macintosh

- If using a LaserWriter, no setup is required. Just follow the procedure in *Chapter 5 - Macintosh Client Setup*.
- If not using a LaserWriter, Mac clients must install the printer driver for the Barricade's printer.

  Also, the *System - Printer Port* screen (below) must be correct.

  Select "Other" for *Printer connected to Barricade* and ensure the *Printer Object Type* is correct. Check your printer's documentation to find the *Printer Object Type*.

  Once this is done, the procedure in *Chapter 5 - Macintosh Client Setup* can be performed.

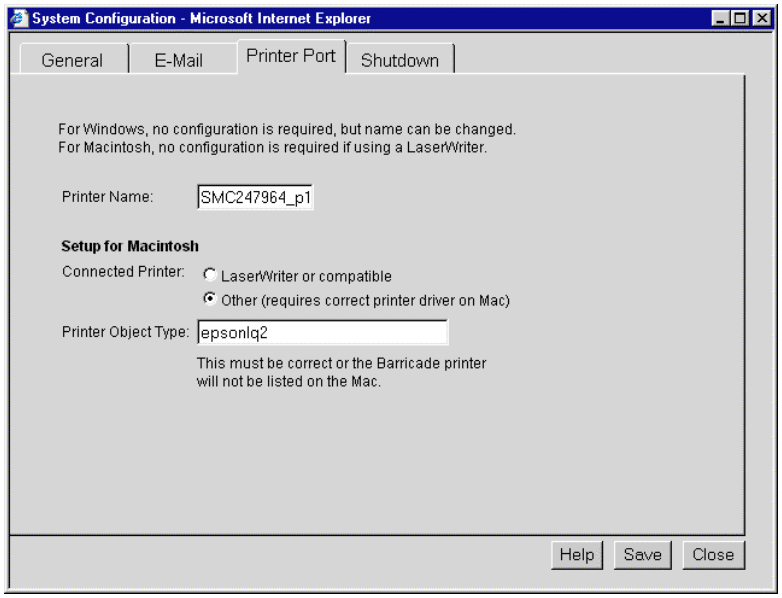

Figure 8: System - Printer tab

4 Internet Access

Overview

The ***Internet Access*** feature allows all LAN users to share an Internet Account via the Barricade's WAN port or serial port. This feature uses NAT (Network Address Translation) to allow all PCs on your LAN to share the one (1) external IP Address provided by your ISP (Internet Service Provider).

Requirements

- Barricade must be installed and configured
- TCP/IP network protocol must be installed on each PC.
- Modem/ISDN TA for access via the Serial Port, or ADSL/Cable modem for access via the WAN (Ethernet) port.
- Internet Account with ISP (Internet Service Provider)

Operation

Once both the Server and the Clients are configured, operation is completely automatic and transparent to the users.

Basic Setup

1. Connect to the Barricade as described in Chapter 3.
2. From the main menu, select *Internet Access*. The *Connection* tab will be displayed.
3. Select the appropriate Internet Access method, and click the *Configure* button.
4. Enter the required details on the resulting screen, using the on-line help if required. This data is available from your ISP (Internet Service Provider).

Filtering

Component Filtering

On the *Filter* screen, you have the option of blocking any of the following Web page components:

- **Java Applets** - These are small programs which run inside the Browser, to provide additional functions. Many stock market sites use Java applets.
- **JavaScript** - Simple programming code embedded in HTML (Web) pages. Scripts perform functions such as checking user input and enhancing the user interface with pop-up messages and other features. Some sites require JavaScript in order to navigate the site effectively. These Scripts are normally harmless, but can be used to open additional Browser windows to display ads.
- **ActiveX Controls** - A Microsoft alternative to Java Applets, with increased power but also higher security risk. Microsoft's "Windows Update" system uses ActiveX controls, so disabling this setting will disable the "Windows Update" feature on each PC.
- **Cookies** - Cookies are small data (text) files which your Browser stores on your disk, and then sends back to the Server later. Cookies are required to use most shopping sites, but can be used by advertisers to track your browsing habits.

Site Filtering

This feature allows you to restrict Web site access by LAN users.

Site Lists

You can create your own site lists, of "Banned" and/or "Allowed" sites. Then you can choose to ALLOW access only to sites on the "Allowed" list, or BLOCK only those sites on the "Banned" list. (Both lists can not be used simultaneously, because then it is not clear what to do with sites which are in neither list.)

To Use the User-defined Site List

Select the appropriate option for *User-defined Site Lists* on the *Filter* tab. Then click the *Edit List* button and enter sites into the "Allowed" and/or "Banned" lists, using either URLs or IP Addresses. You can also upload a file containing URLs to add to the list.

Special Applications

This feature is only required if you wish to use Internet applications which require 2-way communication, multiple connections, or combined TCP/UDP connections.

Examples of such applications are Internet Videoconferencing, Telephony, Games Servers, and other special-purpose Servers. A number of "Special Applications" are already defined, and listed on the *Special Apps* tab.

Generally, you will become aware of the need for this feature when an Internet application is unable to function correctly.

To enable an existing Special Application:

- Select it from the list
- Check the *Enable* checkbox
- Click *Update*.

To change an existing Special Application:

- Select it from the list,
- Make the required changes in the *Properties* fields. (The on-line help provides details about each of the *Properties* fields.)
- Click the *Update* button..

To Add a new Special Application

- Click the *Clear Form* button
- Enter the required data in the *Properties* fields. This data is available from the Service Provider.
- Click the *Add* button

Note that some Special Applications do not use both "Incoming" and "Outgoing" *Protocols* and *Port Numbers*. In this case, leave the port numbers blank for the unused section, and select "Auto" for the protocol.
If only a single port number is required for either "Incoming" or "Outgoing", enter it in the *Start* field, and leave the *Finish* port number blank.

PC Configuration for Special Applications

Once PCs are configured for Internet Access, no changes are required for these Special Applications. Just install, configure, and use the desired program according to the instructions provided with the program.

Virtual Servers

This feature allows you to make a server on your LAN accessible to Internet users. Normally, Internet users would not be able to access a server on your LAN because:

- Any Server on your LAN does not have a valid external IP Address.
- Attempts to connect to devices on your LAN are blocked by the firewall in the Barricade.

The "Virtual Server" feature solves these problems and allows Internet users to connect to your servers, as illustrated below.

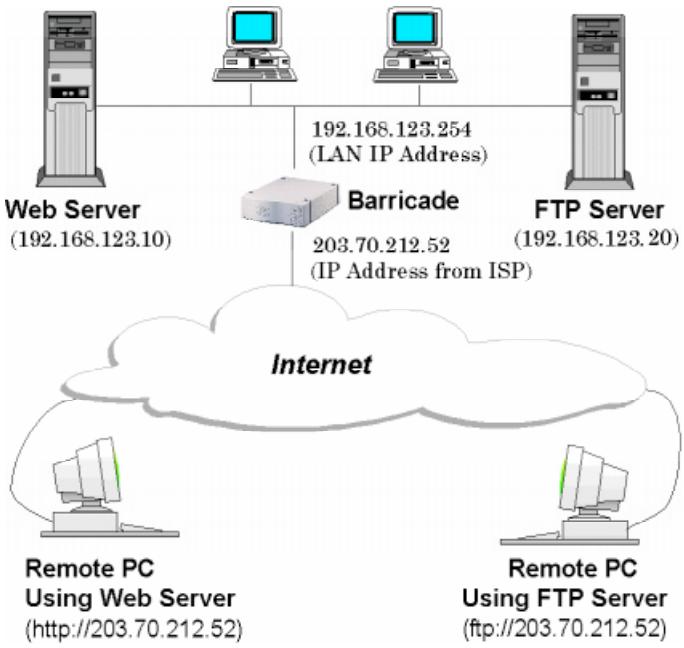

Figure 9: Virtual Servers

Note that, to Internet users, ALL of your Virtual Servers seem to have the same IP Address. This IP address is allocated by your ISP.

To make it easier for Internet users to connect to your Virtual Servers, it is better to have your ISP assign you a fixed IP Address.

To Use the Virtual Server feature

1. Install and configure the desired Server software on a PC on your LAN.
2. Enable the desired Server type on the *Virtual Server* screen on the Barricade, and enter the IP Address of the system running the Server software.
3. Advise users of the IP Address required to connect to the Virtual Servers. This IP Address is supplied by your ISP, and is shown on the Barricade's *Virtual Server* screen.

5 Windows Client Setup

Overview

Supported versions of Windows are:

- Windows 95/98/ME or later
- Windows NT 4.0 or Windows 2000

The following items need to be checked or configured:

- TCP/IP protocol.
- Network Logon
- Mapping to the Barricade's storage.
- Network Printer installation for the Barricade's printer.
- Internet Access configuration.

The sample screens shown are from Windows 98. Other versions of Windows are similar but not identical.

TCP/IP Setup

1. Select the *Control Panel - Network* option on the Start Menu. You should see a screen like the one following.

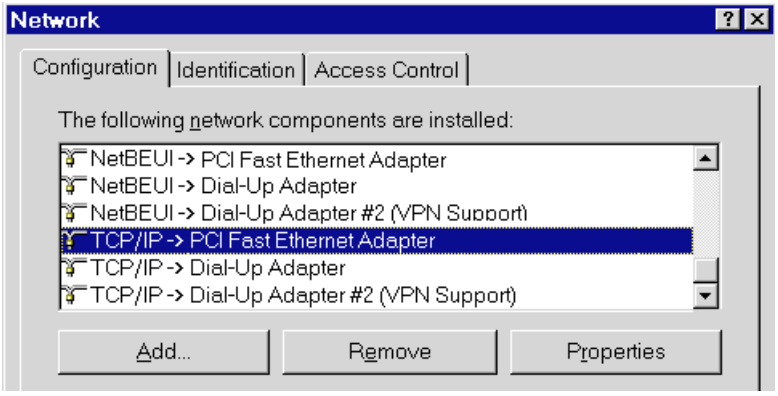

Figure 10: Network Configuration

2. If a line like the one highlighted (TCP/IP -> Network card) is not listed, then you need to install the TCP/IP protocol by selecting *Add - Protocol - Microsoft - TCP/IP - OK*.

3. With the TCP/IP entry highlighted, click on the *Properties* button. The *IP Address* tab will be selected. You should then see a screen like the following.

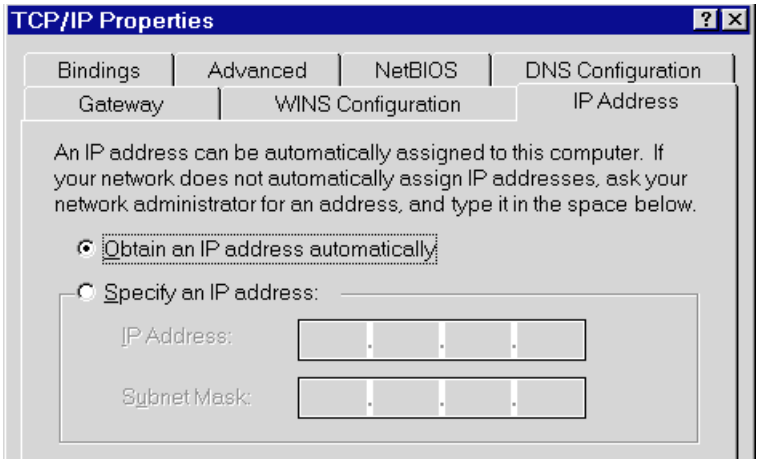
TCP/IP Properties
Bindings
Advanced
NetBIOS
DNS Configuration
Gateway
WINS Configuration
IP Address
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and type it in the space below.
Obtain an IP address automatically
Specify an IP address:
IP Address:
Subnet Mask:

Figure 11: IP Address (Win 95/98)

To act as a DHCP Client:

- Click on the radio button to *Obtain an IP address automatically*, as shown above. If the DHCP Server in the Barricade has been enabled, it will now provide an IP Address and related data to your PC when it boots.
- Restart your PC. (DHCP only functions when your PC starts.)

If using "Specify an IP address" (Fixed IP Address):

No changes are required unless using the Barricade to provide shared Internet Access.

In this case, the *Default Gateway Address* must be set to the Barricade's IP Address, as described below.

To set the Gateway IP Address:

1. Navigate to the TCP/IP Properties screen, as described above.
2. Select the *Gateway* tab.
3. Enter the Barricade's IP Address in the New Gateway field, and click the *Add* button.

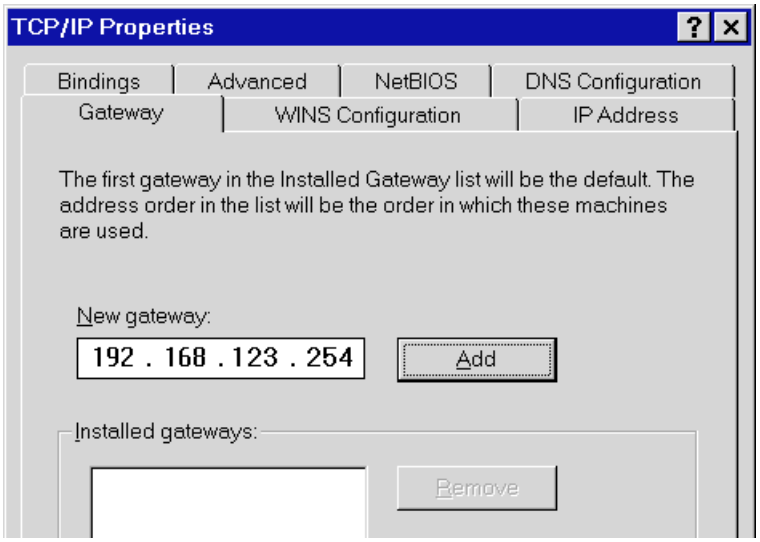

Figure 12: Gateway IP Address

4. Click OK to save and exit.
5. Restart your PC.

Network Logon

To use the Barricade, you must Logon to the Network correctly:

1. Check your Window logon using *Start - Settings - Control Panel - Network.* Ensure the *Primary Network Logon* is set to *Client for Microsoft Networks*, as shown below.

   Note: If this is already set, there is no need to make any changes.

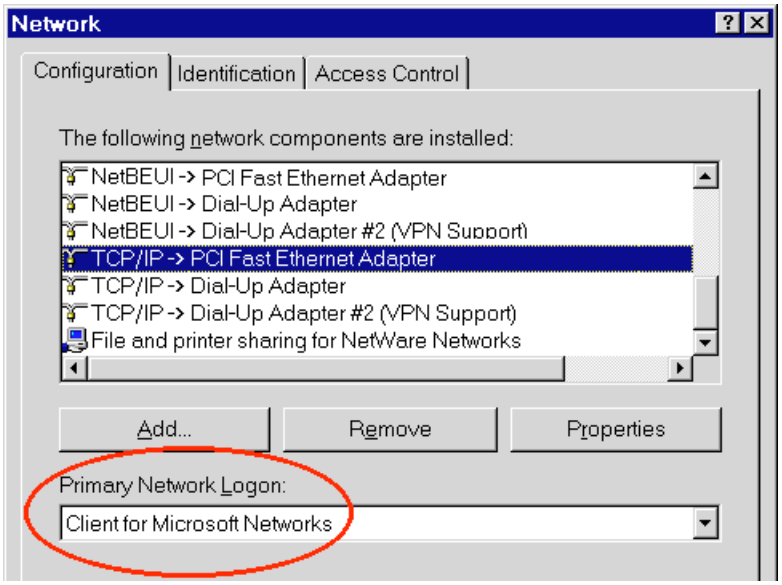

Figure 13: Window Logon

2. Windows will prompt you to Logon to the Network when it boots.

   You must logon. If you press ESC, or click *Cancel*, no network resources will be available. When you logon, you need to use a valid *User Name* and *Password*.

   - If the Barricade Administrator has defined users on the Barricade, use the *User Name* and password they supply.
   - If you use a *User Name* and password which is not recognized by the Barricade, you can still use it, with *guest* access rights. By default, this allows read/write access to the "public" share, but the Administrator can set the *guest* access rights as they wish.

Changing your Barricade Password

Once the Barricade Administrator has given you a valid *User Name* on the Barricade, you can use the following procedure to change your password.

The password for the *admin* user can NOT be changed using this method. The *Administrator* interface must be used.

1. Start your WEB browser
2. In the *Address* box, enter:

   `HTTP://ip_address/user.pl`

   Where `ip_address` is the IP Address of the Barricade.
   e.g.

   `HTTP://`192.168.123.254`/user.pl`

   If you do not know the IP Address of the Barricade, ask the Barricade administrator.
3. You will be prompted for your name and password. Enter your existing user name and password.
4. On the next screen, enter your new password.
5. Save, then close your Browser.

Using the Barricade's Storage

To use the Barricade's storage, you should "Map" a drive letter to each folder on the Barricade folder which you wish to access. The "Network Drive" will then be available to all Windows programs. The procedure is as follows:

1. Double-click the *Network Neighborhood* icon on the desktop.
2. On the "View" menu, select *Details*. The *Comment* column will now be visible.
3. Locate the Barricade, as shown below. If it is not listed, double-click *Entire Network*. Then double-click the Workgroup that the Barricade is in. (By default, the Barricade is in *Workgroup*.)

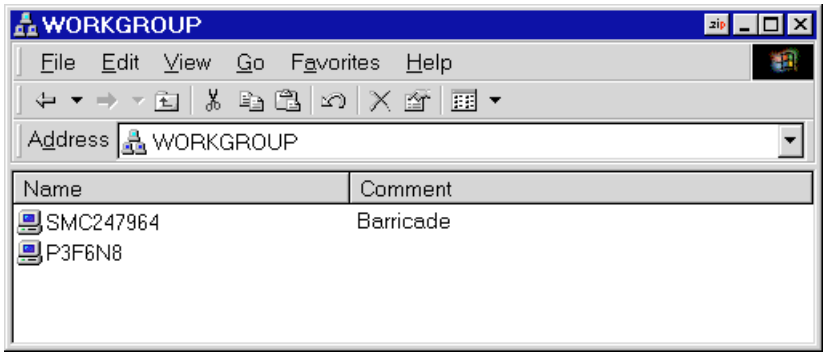

Figure 14: Network Browse

4. Double-click the icon for the Barricade.
5. Right-click a folder (directory) to which you have access, and select *Map Network Drive*, as shown below.

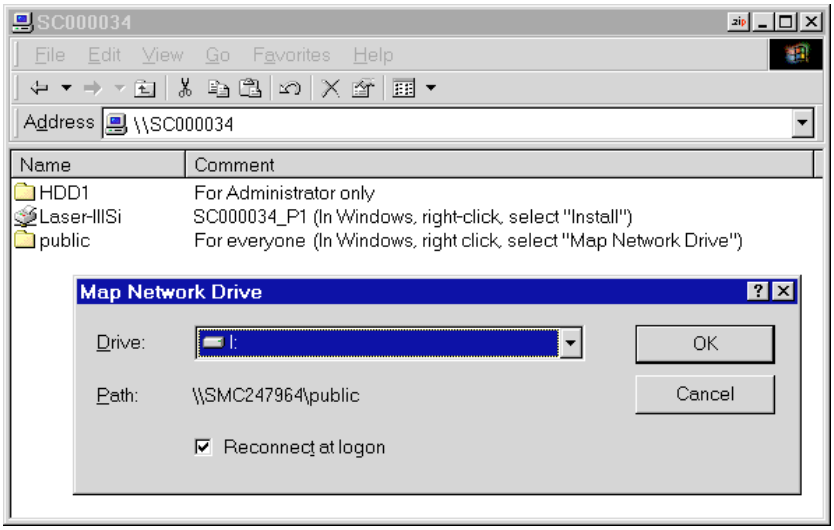

Figure 15: Map Network Drive

6. Select a drive letter for this folder, and check the *Reconnect at Logon* checkbox. (If this is not done, the mapping will be lost when you shut down your PC.) Then click OK.
7. This drive will now be available in Windows Explorer, and from the *File-Open* or *File-Save As* dialog in all Windows applications.

Notes:

- When you try to access a folder, you may be prompted for a password, as shown below:

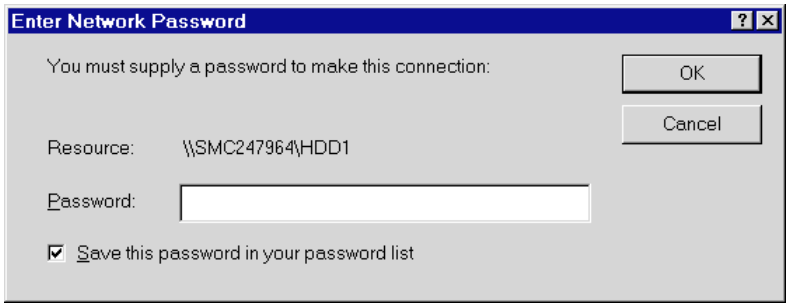

Figure 16: Network Resource Password Dialog

If your Windows logon name is the same as your *user name* on the Barricade, but the passwords are different, you can enter your Barricade password here.

But if your Windows **logon name does not exist** on the Barricade, you will have only *guest* access rights, and **there is no password** which you can enter in this dialog.

- When browsing the Barricade using Windows Explorer or another file manager, you may see the following files, which have been generated by AppleTalk clients:

```
.Apple Desktop
.Apple Double
Network Trash Folder
```

Do NOT delete these files!

Using the Barricade's Printer

1. Find out what printer is connected to the printer port on the Barricade.
2. User *Network Neighborhood* to locate the Barricade, as shown in *Figure 14: Network Browse*.
3. Double-click the Barricade icon. A printer icon should be shown.
4. Right-click the printer icon, and select *Install*. The *Add Printer* wizard will start.
5. Select the *Manufacturer* and *Printer* matching the printer connected to the Barricade.
6. Follow the prompts to complete the installation.
7. The new printer will then appear in your Printer list, and can be used from any Windows application
   - Use the normal Windows commands to manage the printer:
   - Use *Start - Settings - Printers* to list all your printers.
   - Double-click the printer to view or delete the documents in the print queue.
   - Use *File - Set as Default* to make the selected printer the default printer.
   - Use *File - Properties* to view or modify the properties of the selected printer.

Internet Access via the Barricade

Each PC requiring shared Internet Access needs to be configured for:

- Gateway IP Address (TCP/IP)
- Internet Access method
- Proxy Server

Gateway IP Address (TCP/IP)

If using DHCP, no changes are required. Otherwise, the *Gateway IP Address* must be set to the Barricade's IP Address, as described in TCP/IP Setup on page 29.

Internet Access Method

1. Select *Start Menu-Settings-Control Panel-Internet Options*.
2. On the *Connection* tab, click the *Setup* button.
3. Select "*I want to set up my Internet connection manually, or I want to connect through a local area network (LAN)*" and click "Next".
4. Select *"I connect through a local area network (LAN)*" and click "Next".
5. Ensure all of the boxes on the following *Local area network Internet Configuration* screen are **unchecked**.
6. Continue the Wizard, selecting any desired options, until you click the "Finish" button.

Proxy Server Settings

The following Proxy Server settings are required.

Connection Type:	HTTP
Proxy Address:	IP Address of the Barricade (e.g. 192.168.123.254)
Port Number:	3128

The Proxy settings for any other protocols should be left blank.
Do NOT check *Use the same proxy server for all protocols*.

Procedure for Windows & Internet Explorer

1. Select *Start Menu-Settings-Control Panel-Internet Options*.
2. On the *Connection* tab, click the *LAN Settings* button.

3. On the *Local Area Network (LAN) Settings* screen, check both the *Use a proxy server* and *Bypass proxy server for local addresses* checkboxes, as shown above.

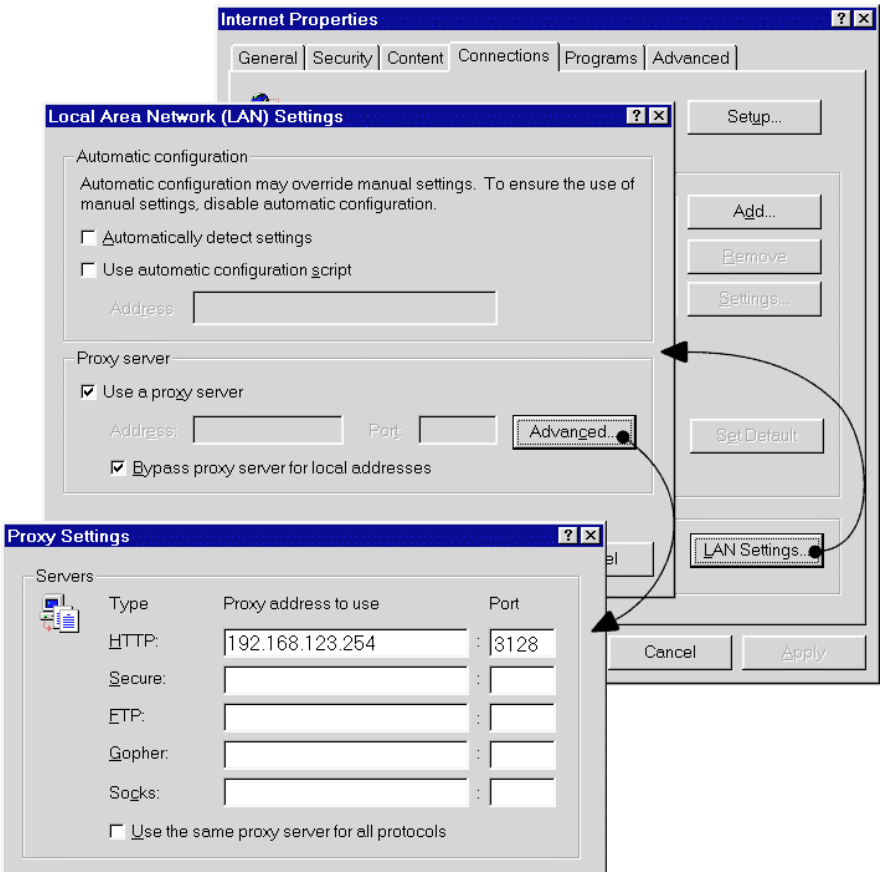

Figure 17: Windows Proxy Server Settings

4. Click the *Advanced* button, and enter the Proxy information for *HTTP*. Do NOT check *Use the same proxy server for all protocols.*

5. Click OK to save and exit.

Procedure for Netscape Navigator

1. Start Netscape Navigator, and select *Edit - Preferences* from the menu.
2. Navigate to the *Advanced - Proxies* screen, select the *Manual Proxy Configuration* radio button, then click the *View* button.

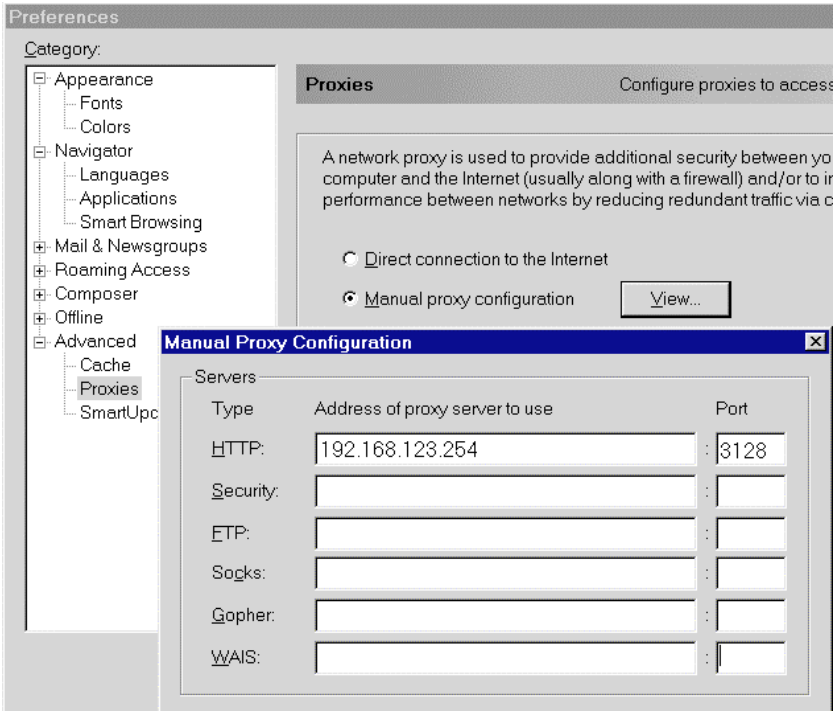

Figure 18: Netscape Proxy Settings

3. Enter the Proxy information for *HTTP*. Leave the other fields blank.
4. Click OK to save and exit.

Procedure for Other Programs

Generally, other programs will use the Windows information. If necessary, check the documentation for the program to see how to set proxy information. Remember that only the HTTP protocol uses the Proxy Server.

Operation - Internet Access

Once both the Barricade and client PCs are configured, operation is completely automatic. Just use your Web browser, FTP client, E-Mail program etc normally.

If no Internet connection exists, and you are using an analog modem, there will be a short delay while the modem dials.

6 Macintosh Client Setup

Overview

To use the Barricade, you require:

- Macintosh OS Version 7.5 or later, with AppleShare.
- The Barricade Administrator must create a value *User Name* on the Barricade for each Mac user. Otherwise, Mac users will only be able to access the Barricade by using the *guest* login.

The following items need to be checked or configured:

- TCP/IP protocol.
- Accessing the Barricade's Disk Storage.
- Network Printer installation for the Barricade's printer.
- Internet Access configuration.

TCP/IP

Generally, no changes are required.

However, if you previously used a fixed (static) IP Address, but now wish to use the DHCP Server function in the Barricade, follow this procedure to make your Macintosh a DHCP Client:

1. Select *Apple - Control Panel - TCP/IP*.
2. Select *Ethernet*, then *Setup*, then *DHCP*.

Accessing Disk Storage

1. Select *Chooser* from the *Apple* menu.
2. Click the *AppleShare* icon.
3. If necessary, select the appropriate zone. (By default, the Barricade is accessible from any zone.)
4. Select the Barricade from the list of File Servers, and click OK.
5. In the *Log-in* dialog, enter your Name and Password. These must match the values stored on the Barricade, or you will not be able to gain access. If the Barricade Administrator has not created a *User Name* for you, click the *Guest* button. This will allow access to the *public* share.
6. A list of "Shares" (Barricade folders) will be displayed. Use the checkbox to indicate which Shares you wish to access. If you select a Share to which you do not have access permission, you will see an error message.
7. Click OK to finish. An icon for each Share will appear on your desktop. You can use these like any other folders.

Using the Barricade's Printer

1. In *Chooser*, select the printer type matching the printer connected to the Barricade.
2. From the list on the right, select the Barricade, then click *Create*. (Refer to *Troubleshooting* if the Barricade's printer is not listed.)
3. The new printer will be created, and can be used like any other printer.

Note:

The *Printer Object Type*, and *LaserWriter/Other* setting, on the *Printer* tab of the *System* menu option, must be correct. See Printer Setup on page 13 for details.

Internet Access via the Barricade

Internet Access Setup

To set your Macintosh up to connect to the Internet through the Barricade using DHCP:

1. Open the TCP/IP Control Panel.
2. Select *Ethernet* from the *Connect via* pop-up menu.
3. Select *Using DHCP Server* from the *Configure* pop-up menu.
   The DHCP Client ID field can be left blank.
4. Close the TCP/IP panel, saving your settings.

Note:

If using manually assigned IP addresses instead of DHCP, the only change required is to set the *Router Address* field to the Barricade's IP Address.

Proxy Server Setup

The following Proxy Server settings are required.

Connection Type:	HTTP
Proxy Address:	IP Address of the Barricade (e.g. 192.168.123.254)
Port Number:	3128

The Proxy settings for any other protocols should be left blank.

Procedure for Internet Explorer

1. Start Internet Explorer, and select *Edit - Preferences* from the menu.
2. Navigate to *Network - Proxies* and check the *Web Proxy* checkbox.

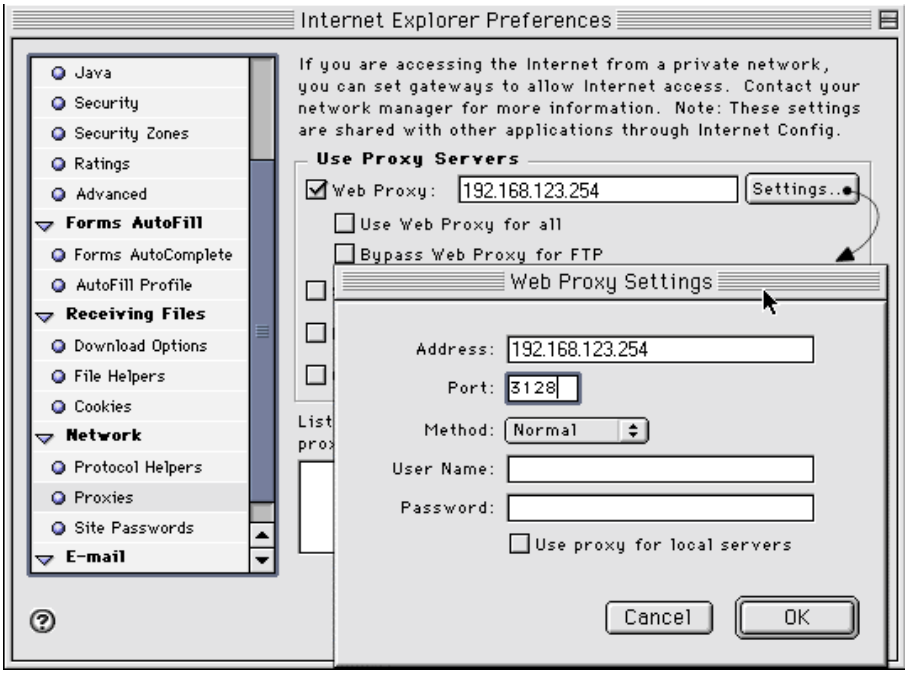

Figure 19: IE Proxy Settings (Macintosh)

3. Click the *Settings* button, and enter the Proxy Data.
4. Click OK to save and exit.
   Do NOT enable any of the other Proxy settings.

Procedure for Netscape Navigator

1. Start Navigator, and select *Edit - Preferences* from the menu.
2. Navigate to the *Advanced - Proxies* screen.
3. Select *Manual Proxy Configuration*, then click the *Configure* button.

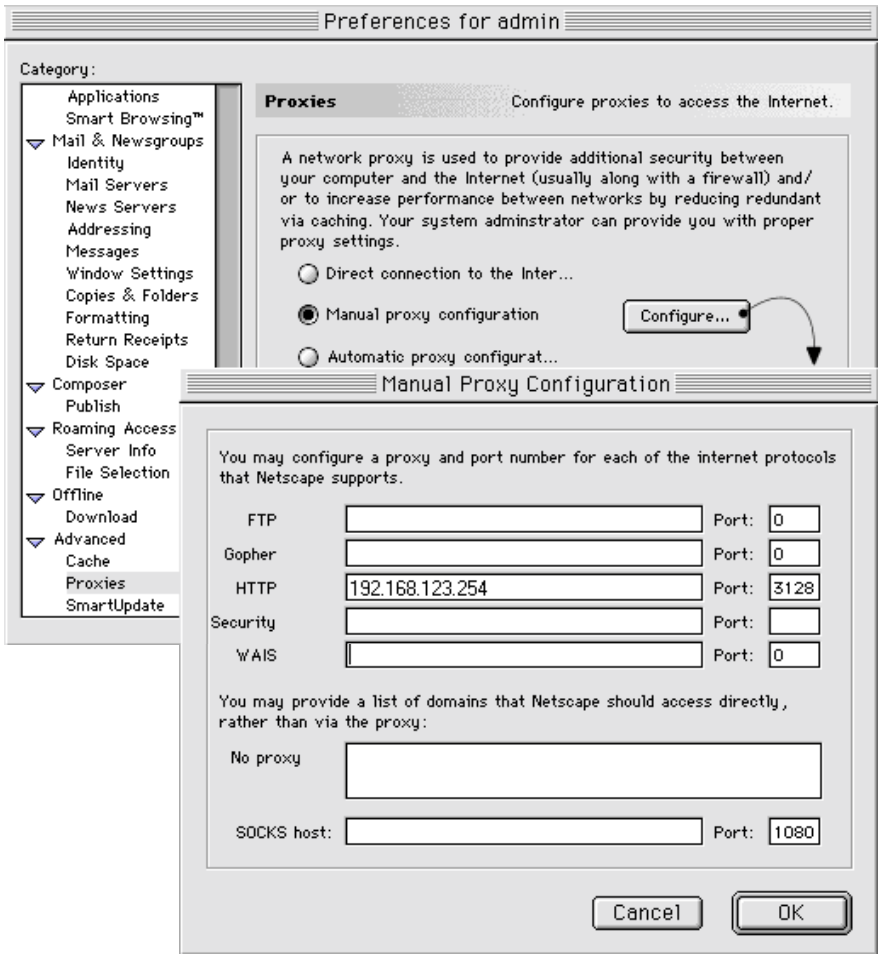

Figure 20: Netscape Proxy Setup (Macintosh)

4. Enter the Proxy data for HTTP.
   Leave the other fields blank.
5. Click OK to save and exit.

Changing your Password

Once the Barricade Administrator has created a valid *User Name* on the Barricade for you, you can use the following procedure to change your password.

The password for the *admin* user can NOT be changed using this method. The *Administrator* interface must be used.

1. Start your WEB browser.
2. In the *Address* box, enter:

   `HTTP://ip_address/user.pl`

   Where `ip_address` is the IP Address of the Barricade, as in the following example:

   `HTTP://`192.168.123.254`/user.pl`

   If you do not know the IP Address of the Barricade, ask the Barricade administrator.
3. You will be prompted for your name and password.
   Enter your existing user name and password.
4. On the next screen, enter your new password.
5. Save, then close your Browser.

7 Troubleshooting

Windows

Problem 1: **The Barricade Utility doesn't list any Barricades.**

Solution 1: Check the following:

- The Barricade is properly installed, LAN connections are OK, and it is powered ON.
- Ensure that your PC and the Barricade are on the same network segment. (If you don't have a router, this must be the case.)
- Ensure that your PC has the TCP/IP network protocol loaded. In Windows, this is done by using *Control Panel-Network*. If an entry for TCP/IP -> Network card is not listed, use *Add - Protocol - Microsoft - TCP/IP* to add it.
  You then need to select the new entry (TCP/IP -> Network card), click *Properties*, and configure the *IP Address* tab.

If your LAN has a DHCP Server, you can select "Obtain an IP Address automatically".

- Otherwise, you must select "Specify an IP Address", and enter values for *IP Address* and *Subnet Mask*. The Barricade's default IP Address is 192.168.123.254, with a Subnet Mask of 255.255.255.0. Remember that each device needs a **unique** IP Address, and the **same** Subnet Mask.

Problem 2: **Using the Barricade Utility, the Barricade is listed, but the *Admin* button doesn't work.**

Solution 2: This will happen if the Barricade's IP Address is not compatible with your PC.

Use the *Quick Setup* button to assign a compatible IP Address and Network Mask (Subnet Mask) to the Barricade, then *Refresh* the listing.

Problem 3: **The Barricade is configured, but I can't find it in *Network Neighborhood*.**

Solution 3 Try using *Start - Find - Computer*, and enter the Barricade's name. If this does not work, use ***Control Panel - Network*** to check the following:

- TCP/IP protocol is installed. If not, use *Add - Protocol - Microsoft - TCP/IP* to install it.
- Check the network Bindings:

Ensure the TCP/IP protocol is bound to your Network card (NIC). Select your Network card, click *Properties*, and then the *Bindings* tab. If TCP/IP is not bound (checked), check it.

Ensure the **TCP/IP -> Network card** entry is bound to the *Client for Microsoft Networks* service.
Select the *TCP/IP* entry for your Network Card, click *Properties*, and then the *Bindings* tab. If *Client for Microsoft Networks* is not bound (checked), check it.

- If you don't have a router, check that your IP Address is compatible with the Barricade's. This means it needs to be from the same address range (e.g. 192.168.123.1 to 192.168.123.254) and using the same *Subnet Mask* (e.g. 255.255.255.0)
- If you DO have a router, check that your *Gateway IP Address* is set correctly. Ask your LAN administrator for the correct value.

Problem 4 When I click on the Barricade icon in Network Neighborhood, I get prompted for a password.

Solution 4 This can happen in the following situations:

- The Logon name you used on your PC is recognized by the Barricade, but the password is not. Simply enter your Barricade password, or make your Windows password the same as the Barricade password.
- The logon name you used on your PC is NOT recognized by the Barricade, and was converted to *guest*, with *guest* access rights. Ask the Barricade Administrator to create a *user name* for you. (Use the same name as on your PC.)
- You do NOT have access permission for this share.
  Ask the Barricade Administrator to grant you access.

Note: Windows uses the *Computer name*, as shown on *Control Panel - Network - Identification*, as the default *Logon Name*. But you can create a new Windows logon name by merely entering a new name and password at the Logon prompt.

Problem 5 **When using the Web interface, some of the data will not fit on the screen, and there is no scrollbar.**

Solution 5 This will only happen if you use extra large fonts, either in your Browser or in Windows. You must reduce the font size:

- In your Browser, select *View - Fonts* to change the font size.
- In Windows, use *Control Panel - Display - Settings - Advanced* to change the font size. Either of the 2 standard settings - *Small* or *Large (125%)* - should work.

Problem 6 **A print job does not print. No error message is displayed.**

Solution 6 This can happen if the amount of free disk space is not sufficient to spool (queue) the print job. Disk Usage can be checked using the *Status - Disk* screen on the *Administrator* interface. If this is the problem, you must delete some print jobs:

- Using the *Administrator* interface, select *Status - Printer*.
- Use the *Delete current job* to delete the current print job, or *Delete all jobs* to delete all print jobs.

These options can also be used if for some reason a print job or jobs does not print correctly.

Macintosh

Problem 1: **Can't connect to the Barricade to configure it.**

Solution 1: Check the following:

- The Barricade is properly installed, LAN connections are OK, and it is powered ON.
- If your LAN has a router, ensure that your Mac and the Barricade Device are on the same network segment.
- If any PC or device on the LAN is already using the Barricade's default IP Address of 192.168.123.254, that PC or device must be turned OFF until the Barricade is allocated a new IP Address.
- Ensure that your Mac is using an IP Address within the range 192.168.123.1 to 192.168.123.253 and thus compatible with the Barricade's default IP Address of 192.168.123.254. Also, the *Subnet Mask* should be 255.255.255.0.
  This can be checked using *Apple - Control Panel - TCP/IP*.

Problem 2: **Barricade's printer is not listed on my Mac.**

Solution 2:

- On the Barricade's *System - Printer* screen**,** check the **Printer Object Type**. If this is not correct, the Barricade's printer will not be listed on the Macintosh.
  Check the Printer's User Manual for this data, or contact the printer supplier.
- On each Mac, check that the **Printer Driver** is installed.
  If not using a LaserWriter, each Mac must have the printer driver for the printer installed. Otherwise, the correct printer type can not be selected, so the Barricade will not be listed.

Problem 3: **The printer does not work at all, or does not work properly.**

Solution 3: On the Barricade *System - Printer* screen, check the following:

- **Printer Connected to the Barricade** is set correctly ("LaserWriter" or "Other").
- **Printer Object Type** is set correctly. If this is incorrect, then Mac clients may be able to select an incorrect printer.

Problem 4 **The printer was working, but now it doesn't. The printer seems OK, and no error message is displayed.**

Solution 4 This can happen if the amount of free disk space is not sufficient to spool (queue) the print job. Disk Usage can be checked using the *Status - Disk* screen on the *Administrator* interface.
If this is the problem, you must delete some print jobs, as follows:

- Using the *Administrator* interface, select *Status - Printer*.
- Use the *Delete current job* to delete the current print job, or *Delete all jobs* to delete all print jobs.

These options can also be used if for some reason a print job or jobs does not print correctly.

Problem 5 **When using the Web interface, some of the data will not fit on the screen, and there is no scrollbar.**

Solution 5 You must reduce the font size. In your Browser, select *View - Fonts* to change the font size.

Problem 1: **I can't connect to any Web sites from my PC.**

Solution 1:

Check the modem:

- Ensure that the cable and line connections are OK.
- Check that the modem is ON.

Check the Barricade:

- Connect to the Barricade's "Administration" interface, and select *Internet* on the main menu.
- Click *Configure* on the *Connection* tab, and ensure that the configuration data is correct.
- Select the *Status* tab.
- Examine the log messages to determine if there is a problem. Refer to the on-line help for details of the log messages.
- Depending on your connection method, you may have a *Dial* or *Connect* button. If so, you can use these to see if a connection is successfully established.
- If the connection is being successfully established, the client PC should be checked.
  If the connection is not being established, the problem is in the WAN connections or configuration.

Check the PC:

TCP/IP

- Ensure that your PC has the TCP/IP network protocol installed and set correctly.
- Refer to *Client Configuration* for details.

Internet Access

- Ensure that your PC is set to access the Internet via the LAN, rather than a "Dial-up" connection.
- Refer to *Client Configuration* for details.

Proxy Server

- The Barricade's Proxy Server should only be used for the HTTP protocol. Other protocols should NOT use the Barricade as a Proxy Server.
- Refer to *Client Configuration* for details.

Problem 2: **I can access the Internet, but some applications don't function correctly.**

Solution 2: The non-functional applications may require a "Special Applications" entry, or the existing entry may need to be *Enabled*.

Using the **Administration** interface, select *Internet* from the main menu, and then select the *Special Apps* tab.

- If an entry for the application exists, ensure that it is *Enabled*.
- If the entry is already *Enabled*, check that the *Properties* values are correct. (If the *Properties* fields show "n/a", there are no user-adjustable settings.)
- If there is no entry for the application, you can add one. The required data is available from the service provider. Refer to the on-line help for further details.

Note:

Not all applications will function correctly, even after adding a "Special Application" entry. This is due to the difficulty of distinguishing a non-standard application from an attack on your LAN. Generally, the Barricade's firewall will assume "suspicious" behavior is an attack, and will block it.